IN THE CLAIMS

Claims 1-82 (Previously cancelled)

Claim 83. (Previously presented): A method for actuating or installing downhole equipment in a wellbore, comprising the steps of:

(a) providing, a first downhole structure that comprises an RF identification transmitter unit that stores an identification code and transmits an RF signal corresponding to the identification code, wherein a plurality of first downhole structures are located at different depths in a wellbore, each of the first downhole structures comprises a tubular member having a hollow axial bore therethrough and the RF identification transmitter unit secured thereto;

(b) providing a second downhole structure that comprises an RF receiver unit that can receive the signal transmitted by the identification transmitter unit, decode the signal to determine the identification code corresponding thereto, and compare the identification code to a preset target identification code; wherein one of the first downhole structure and the second downhole structure is secured at a given location in a subterranean wellbore, and the other is moveable in the wellbore;

(c) placing the second downhole structure in close enough proximity to the first downhole structure so that the RF receiver unit can receive the RF signal transmitted by the RF identification unit;

(d) comparing the identification code determined by the RF receiver

unit to the target identification code, wherein the determined identification code is used to determine the depth of the second downhole structure in the borehole; and

(e) if the determined identification code matches the target identification code, actuating or installing one of the first downhole structure or second downhole structure in physical proximity to the other.

Claim 84. (Previously presented) The method of claim 83, wherein the plurality of tubular members are joints of completion tubing that are attached end to end.

Claim 85. (Previously presented) The method of claim 84, wherein each identification transmitter is secured near one end of the respective joint of completion tubing.

Claim 86. (Previously presented) The method of claim 83, wherein second downhole structure is a perforating gun, and the determined depth is used to determine when to fire the gun.

Claims 87-104 (Previously cancelled)

Claim 105. (Previously presented) A method of performing a operation in a well comprising:

transporting a tool and a reader assembly through a well having a plurality of radio identification devices capable of transmitting a unique signal to identify each of the plurality of radio identification devices and the depth thereof in the well; and

controlling at least one operation of the tool responsive to the reader assembly locating one of the plurality of radio identification devices which is located at a depth in the well appropriate for conducting the at least one operation.

Claim 106 (Previously presented) The method of claim 105 wherein a plurality of tubular elements are positioned in the well and the tool and the reader assembly are transported through the plurality of tubular elements and each of the plurality of radio identification devices are secured to separate tubular elements.

Claim 107. (Previously presented) The method of claim 106 wherein the plurality of tubular elements define well casing.

Claim 108. (Previously presented) The method of claim 106 wherein the controlling step is performed by transmitting a control signal from the reader assembly to the tool.

Claim 109. (Previously presented) The method of claim 106 wherein the controlling step is performed dynamically as the tool is transported through the plurality of tubular elements.

Claim 110. (Previously presented) The method of claim 106 wherein the controlling step is performed statically by stopping the tool proximate to said one of the plurality of radio identification devices.

Claim 111. (Previously presented) The method of claim 106 wherein the tool is a perforating tool and the operation is a perforating operation.

Claim 112. (Previously presented) The method of claim 110 wherein the controlling step includes detonating the perforating tool responsive to a control signal from the reader assembly.

Claims 113 –114 (Cancelled)

Claim 115. (Previously presented) The method of claim 106 wherein the transporting step is performed using a transport mechanism selected from the group consisting of wire lines, pumps, blowers, parachutes. coil tubing and tubing strings.

Claim 116. (Previously presented) The method of claim 106 wherein the transporting step is performed by gravity.

Claim 117. (Previously presented) The method of claim 106 wherein the operation comprises a process selected from the group consisting of perforating processes, packer setting processes, bridge plug setting processes, logging processes, inspection processes, chemical treating processes, casing patch processes, jet cutting processes and cleaning processes.

Claim 118. (Previously presented) The method of claim 106 further comprises spacing the tool from the reader assembly by a selected distance.

Claim 119. (Previously presented) The method of claim 106 wherein the transporting step includes transporting a second tool, the method further comprising:

> controlling the operation of the second tool responsive to the reader assembly locating one of the plurality of radio identification devices which is at a depth in the well appropriate for conducting the operation of the second tool.

Claim 120. (Previously presented) The method of claim 119 wherein the tool and the second tool are initially attached to one another and separated between the one of the plurality of radio identification devices and the another of the plurality of the radio identification devices.

Claim 121. (Previously presented) The method of claim 106 wherein the reader assembly comprises a radio frequency transmitter configured to provide a transmission signal for reception by the radio identification devices and a receiver configured to receive response signals from the radio identification devices.

Claim 122. (Previously presented) The method of claim 106 wherein the tool comprises a combination tool configured to perform multiple operations in the well.

Claim 123. (Previously presented) The method of claim 106 wherein the transporting step is performed by free falling the tool and the reader assembly through the plurality of tubular elements.

Claim 124. (Previously presented) The method of claim 105 further comprising establishing a record of the well using information obtained during the transportation of the reader assembly through the well.

Claim 125. (Previously presented) A system for performing an operation in a well comprising:

at least one tool configured for transport through a well;

a plurality of radio identification devices located at spaced intervals at known depths in the well and configured to transmit response signals for uniquely identifying each radio identification device and the depth thereof in the well; and

a reader assembly configured for receiving the response signals from the radio identification devices and for controlling the operation of the at least one tool at an appropriate depth in the well responsive to the response signals.

Claim 126. (Previously presented) The method of claim 125 wherein a plurality of tubular elements are positioned in the well, the at least one tool is configured to be transported through the plurality of tubular elements, and each of the plurality of radio identification devices are secured to separate tubular elements within the well.

Claim 127. (Previously presented) The system of claim 126 wherein the reader assembly is attached to the at least one tool.

Claim 128. (Previously presented) The system of claim 126 further comprising a transport mechanism configured to move the at least one tool and the reader assembly through the well.

Claim 129. (Previously presented) The system of claim 128 wherein said transport mechanism comprises a mechanism selected from the group consisting of wire lines, pumps, blowers, parachutes, coil tubing and tubing strings.

Claim 130. (Previously presented) The system of claim 126 wherein said at least one tool is configured for transport through the plurality of tubular elements by gravity.

Claim 131. (Previously presented) The system of claim 130 wherein said at least one tool is configured to free fall through the tubular elements.

Claim 132. (Previously presented) The system of claim 126 wherein said reader assembly comprises a receiver configured to receive the response signals and a transmitter configured to transmit transmission signals to the plurality of radio identification devices.

Claim 133. (Previously presented) The system of claim 126 wherein the reader assembly further comprises a control circuitry or a computer.

Claim 134. (Previously presented) The system of claim 132 wherein the reader assembly is programmed to control the operation of the at least one tool in situ within the well.

Claim 135. (Previously presented) The system of claim 126 wherein the reader assembly further comprises a controller at the surface.

Claim 136. (Previously presented) The system of claim 125 wherein the at least one tool is at least one perforating tool having at least one charge assembly.

Claim 137. (Previously presented) The system of claim 136 further comprising a detonator in signal communication with the reader assembly and configured to detonate the at least one charge assembly.

Claim 138. (Previously presented) The system of claim 126 wherein adjacent tubular elements of said plurality of tubular elements are secured together by a collar which includes one of said plurality of radio identification devices.